

What
you
should
know
about

broadband



Before you decide on installing broadband, there are a few things that you should consider...

LANZen

secure information solutions

So what is broadband?

Broadband or ADSL is a technology that allows a data signal to flow simultaneously down the same line used for a telephone or fax.

This means that you only need to have one BT line installed - and because it can serve both as a telephone line and a computer data line, it saves you money.

What's the difference between a leased line and broadband?

Leased lines are dedicated data lines that only carry your data and no one else's. Broadband lines are shared lines carrying other people's data as well as yours. This is known as contention.

Leased lines run from point to point - from A to B - while broadband lines run from your premises to an Internet access point called a Home Gateway.

Leased lines carry data at a fixed rate both ways - like 64K, 256K, 2Mb, or 10Mb and upwards.

Broadband is mainly available as 512K and 2Mb, with some providers offering variations on this.

But the biggest difference in terms of performance is that broadband is asynchronous - this is the "A" in ADSL - and means that the actual speed upstream (out of your premises) is much slower than the speed downstream (into your premises).

Cost-wise, leased lines are very expensive to both install and run - often as much as £400 to install and £12,000 per year to rent.

So does this mean that broadband can save me money?

That depends on what you intend to use it for. If you're installing it at home or your office and want to just surf the Internet, yes.

But if you're planning on linking two offices together or want to send a lot of information to suppliers, clients or customers via a web server running in your office, it may not be for you.

This is because the speed of the line out of your office is only 256K, so your data can only ever get up to that speed as a maximum. As the line is shared - the contention we talked about - this is often much less at busy times of the day or evening.

Why should contention concern me?

My business depends on my Internet connection - how reliable is ADSL?

How quickly does BT respond to fault reports?

BT offers a business broadband service. This is surely a safe option?

Contention or the contention ratio is the number of other users who share your line. If you had a contention ratio of 1:1, like a leased line, you would always get the full advertised speed.

However, consumer lines have a contention ratio of 50:1 - fifty other homes or businesses sharing the same line at the same time, or 20:1, twenty others sharing.

This means that a broadband connection can sometimes be like a busy road with a traffic jam as data queues up to travel along it!

ADSL Broadband uses the normal voice lines run by BT. The added complexity of a broadband service run over them shouldn't make any difference to the service.

However, most users report disruption to the service - particularly at night or weekends following routine maintenance work on the exchange or cable network.

This is because the network that broadband uses is mainly a voice-based one, so engineers often upset the system by accident!

We'd love to report that the BT fault service provides a top rate response. The truth of the matter is that it simply does not.

BT offers no service level agreement (SLA) at all for any part of its broadband service. It only guarantees to "respond" within 24 hours during the normal working day of 9 to 5.

This means that BT are under no obligation whatever to fix your line. They are not liable to pay any penalties whatsoever, other than the standard BT loss of a voice line "token" payment after a loss of many days.

There are many cases of broadband lines being down for days and sometimes weeks if the problem is within the exchange.

You'd think so - but again, no. BT does not provide any additional support for businesses. BT do not even entertain any faults on broadband connections attached to networks, like a couple of PC attached to a firewall.

BT will insist that you disconnect any equipment attached to their connection before they will test the line and even then, the standard of test is at the mercy of largely unqualified call centre staff provided by BT's ISP, BT Openworld.

I notice that many other suppliers offer a broadband service. Are these better?

So does all this mean that I should avoid a broadband connection?

Are there any alternatives to a broadband connection?

There are two ways that you can get broadband without using BT's own service. One uses the same service re-sold under someone else's name, like EasyNet, FreeServe or Tiscali, or you can choose a company that installs its own equipment in BT's exchange and routes onto its own network, like MCI or Pipex.

Choosing an independent service provider offers a far more reliable service very often but because the connection from your premises to the exchange is still BT's own cable - the local loop, it can still be brought crashing down by an unskilled BT engineer!

No. It just means that you have to consider the risks involved in having such a low-cost service and ensure that any service that uses broadband isn't critical to your business.

If this can't be avoided, then you should plan around any failure by doing the following:

1. Choose a supplier that offers a service level agreement (SLA).
2. Put a plan in place for an alternative service, like a dial-up line or other service, or even have another connection, preferably at another location!
3. Look to pooling resources with other companies in the same building or area (maybe using a wireless connection between you) so that in the event of a failure you still have some way of accessing the Internet.

New developments are appearing all the time, like cable services, satellite and even a mains-based service being introduced by the power utility companies.

To be able to know which options suit your business, you should contact a network consultant - like us - as we deal with the problems faced by businesses every day and can offer good un-biased advice.

Just make sure they aren't just paid to offer the BT wholesale broadband offering, or the advice may not be worth a whole lot!

See the LANZen web site for details of our computer and network design and consultancy service.

<http://www.lanzen.co.uk> or mail us on info@lanzen.co.uk

LANZen secure information solutions